ABSTRACT

A map which defines a relationship of an exhaust gas pressure P2 at the outlet of a filter (13) to a load Q and rotation speed Ne of an engine (1) is prepared, and an exhaust gas pressure P1 at the inlet to the filter (13) is determined from a differential pressure ΔP between the front and rear of the filter and the outlet pressure P2 obtained by referring to the map. The inlet pressure P1 determined in this manner is used to determine an exhaust gas volumetric flow rate Q1, and thus an accurate particulate accumulation SM, which is required to determine the need for regeneration of the filter (13), can be calculated.